New tests of the common calibration context for ISO, IRTS, and MSX

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Abstract

I review ongoing work designed to test, verify and validate the accuracy in shape and absolute level of the calibration spectra provided to ISO for external calibration support of the instruments. Independent validation of the spectra of bright K/M giants comes from radiometry from DIRBE and MSX/Spirit-III, and from angular diameters. In particular, absolute confirmation at the level of 3% is achieved by Spirit-III. A direct test of the fainter "calibrated stellar templates" is afforded by the NIRS aboard the IRTS. Over 300 new calibrated templates were created this month and will soon be available to replace the first generation of 183 such templates provided to ISO prelaunch. I will describe work planned on comparing FIR spectra of Mars and some of the bright stellar calibrators, such as α Boo, with LWS. A new mm-wave observing programme is designed to compare Mars and stars directly, in the 1-3 mm region using the BIMA array. The goals are to relate and reconcile models of stars, asteroids, and planets.